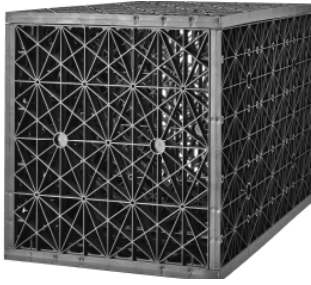


Atlantis Matrix Tank Storm Water Management Product Specification



1. Product Description

The Atlantis® Matrix Tank is a modular underground tank system that provides a highly efficient method to manage storm water. This subsurface system can be constructed to hold any volume required being limited only by the area available. The Atlantis tanks are assembled from small plates and large plates. Depending on loading and design, the quantity of small plates can be increased to up to seven for each module

to handle higher loading. Applications include: construction of infiltration tanks, water re-use tanks, and sub-surface channels. Sediment can be removed by pretreating stormwater and/or by installing maintenance ports or a lower tank (forebay) with a maintenance port.

2. Technical Data

Materials information below in Chart.

3. Installation

Installation of Atlantis tanks must be in accordance with the latest installation manual which is available from Atlantis. The installation begins with site excavation, base preparation and compaction to 95% of standard proctor. The base is then covered with a layer of angular stone and sand to a depth of 100 mm. A nonwoven geotextile and /or geomembrane are installed on the base. The Atlantis tank modules are assembled to the desired configuration and placed within the excavation. Piping is installed and then the geotextile and/or geomembrane are wrapped around the installed modules. Place clean sand backfill around the sides of the tanks in 150 mm lifts and compact to 95% and then place sand above the tanks and compact. Careful attention should be paid to the manufacturer's recommended construction and compaction equipment that should be used when installing this system. This can be found in the installation manual. A Tensar TX5 geogrid is installed at 300 mm over the structure and extending beyond the edges by 900 mm or as required by the plans. Refer to and follow project specific drawings and specifications. Once the construction is complete it should be cordoned off and protected from heavy construction vehicle traffic.

4. Maintenance

Storm storage systems should be inspected on a regular schedule and after every major precipitation event. Inspect sediment traps and filters for accumulated debris and/or sediment. Inspect and schedule the removal of accumulated sediment to suit your site conditions but at least annually.

5. Material Properties

	Atlantis Matrix Tank - Metric Values					
	Mini	Single	Double	Triple	Quad	Penta
Height (mm)	240	450	880	1310	1740	2170
Length (mm)	685	685	685	685	685	685
Width (mm)	408	408	408	408	408	408
Tank Volume (m ³)	0.07	0.13	0.25	0.37	0.49	0.61
Water Storage Volume	64	120	234	348	462	576
Number of Plates (large /	2 / 4 / 2	4 / 4	7 / 8	10 / 12	13 / 16	16 / 20
Tank Weight (kg)	4	6.5	12	17.5	24	41
Void Space	Approx. 95 to 90 % (4 to 7 plate tanks)					
Material	85% recycled Polypropylene + 15% Atlantis proprietary selected materials					
Vertical Compressive Strength						
	4 Plate tank		5 Plate tank		7 Plate tank	
Ultimate Strength (Tonnes per m ² / PSI)	22 / 31.3		24 / 34.1		31 / 44.1	
Design Strength (Tonnes per m ² / PSI)	11 / 15.6		12 / 17.0		15.5 / 22.0	

NOTES:

The design strength above is based on the manufacturer's recommendation for a minimum factor of safety of 2 on ultimate compressive strength of material due to variation in recycled plastic batches. Additional factors of safety may be applicable.

Installation of Atlantis tanks must be in accordance with the latest installation manual including specific compaction and equipment requirements.